



US009261952B2

(12) **United States Patent**  
**Greene et al.**

(10) **Patent No.:** **US 9,261,952 B2**  
(45) **Date of Patent:** **Feb. 16, 2016**

(54) **SHIFTING AND RECHARGING OF  
EMOTIONAL STATES WITH WORD  
SEQUENCING**

USPC ..... 715/810  
See application file for complete search history.

(56) **References Cited**

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U.S. PATENT DOCUMENTS

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(\*) Notice: Subject to any disclaimer, the term of this  
patent is extended or adjusted under 35  
U.S.C. 154(b) by 604 days.

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(57) **ABSTRACT**

The shifting and recharging of an emotional state with word sequencing is disclosed. A selection of a first word sequence set is received from the user. The word sequence set is defined by a mood recharging characteristic value, and includes a plurality of words each with at least one corresponding definition. A first one of the plurality of words in the selected first word sequence set is displayed. Then, a first one of the at least one corresponding definition of the first one of the plurality of words in the first word sequence set is displayed while the first one of the plurality of words remains displayed. The definition remains displayed for a time duration corresponding to a predefined cadence rate value. The user is prompted with a question related to the mood recharging characteristic value and associated with the first word sequence set.

(21) Appl. No.: **13/759,801**

(22) Filed: **Feb. 5, 2013**

(65) **Prior Publication Data**

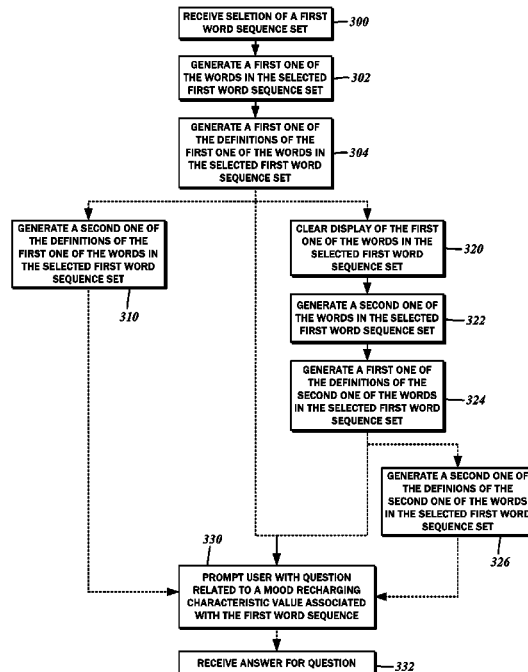
US 2014/0223363 A1 Aug. 7, 2014

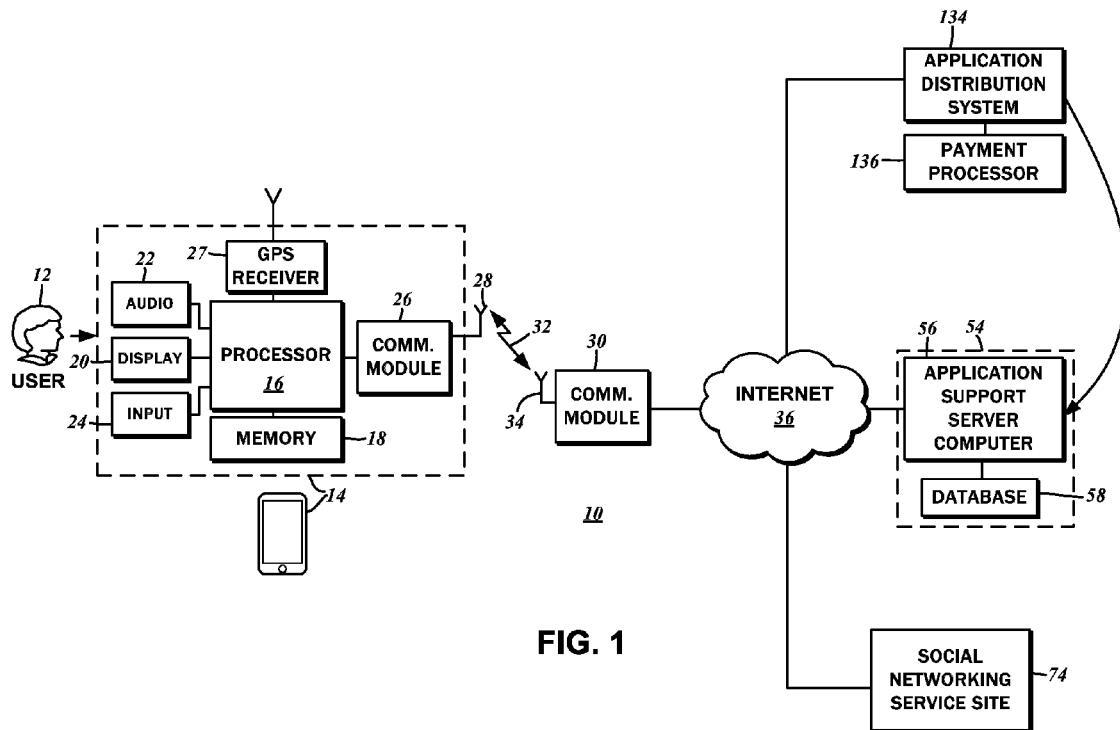
(51) **Int. Cl.**  
**G06F 3/01** (2006.01)  
**G06Q 90/00** (2006.01)

(52) **U.S. Cl.**  
CPC . **G06F 3/01** (2013.01); **G06Q 90/00** (2013.01)

(58) **Field of Classification Search**  
CPC G06F 3/04842; G06F 3/048; G06F 17/30867

**21 Claims, 14 Drawing Sheets**





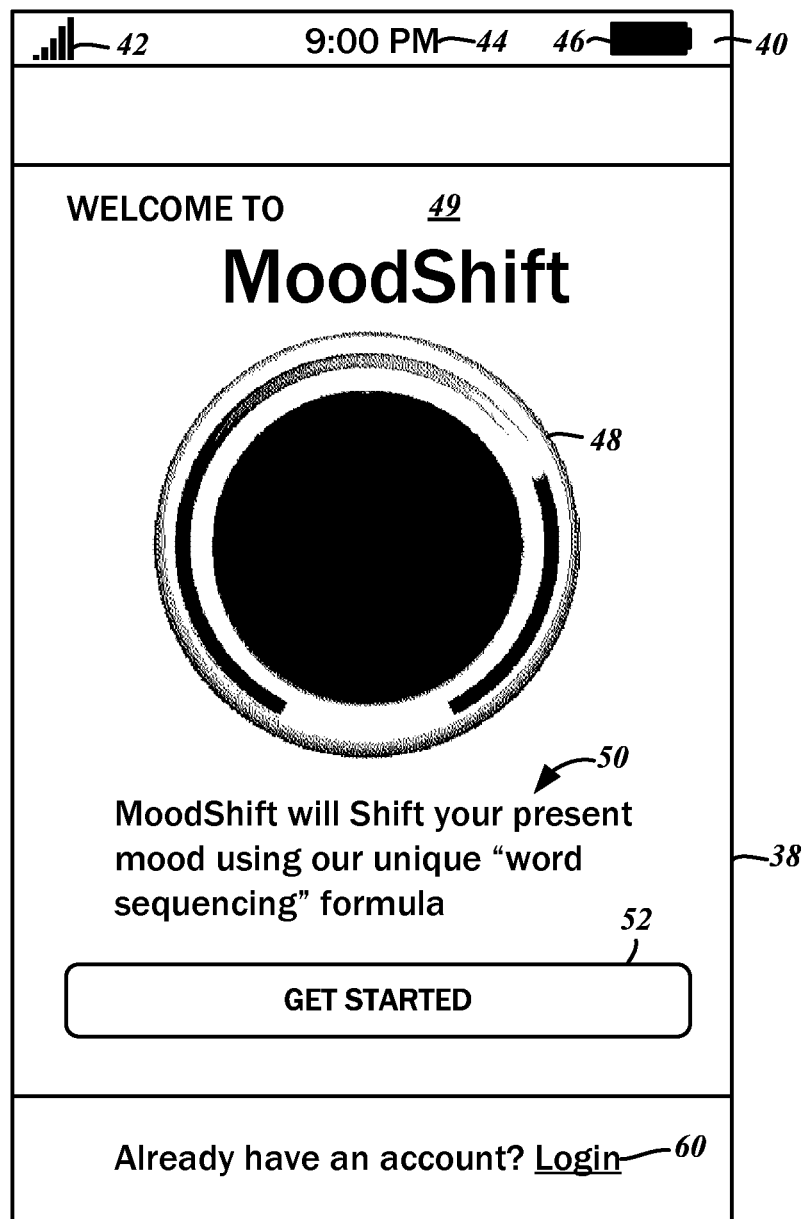


FIG. 2A

FIG. 2B is a screenshot of a mobile device screen displaying the MoodShift login interface. The status bar at the top shows a signal strength indicator, the time 9:00 PM, and a battery level indicator. The interface includes a 'BACK' button (51) in the top left. The title 'MoodShift' (52) is centered, followed by 'LOG IN WITH'. Below this are two buttons: 'Facebook' (76a) and 'Twitter' (76b). A separator '- OR -' is centered below these buttons. Below the separator is an 'E-MAIL ADDRESS' input field (60). Below the email field is a 'PASSWORD' input field (61). Below the password field is a 'FORGOT PASSWORD?' link (64) and a 'LOG IN' button (63). The entire content area is enclosed in a frame (38).

FIG. 2B

FIG. 2C is a screenshot of a mobile device screen displaying the password reset interface. The status bar at the top shows a signal strength indicator, the time 9:00 PM, and a battery level indicator. The interface includes a 'LOG IN' button (72) in the top left and a 'SEND' button (70) in the top right. The title (66) is centered, followed by the text 'ENTER YOUR E-MAIL ADDRESS TO RECEIVE INSTRUCTIONS FOR RESETTNG YOUR PASSWORD'. Below this text is an 'E-MAIL ADDRESS' input field (68). The entire content area is enclosed in a frame (38).

FIG. 2C

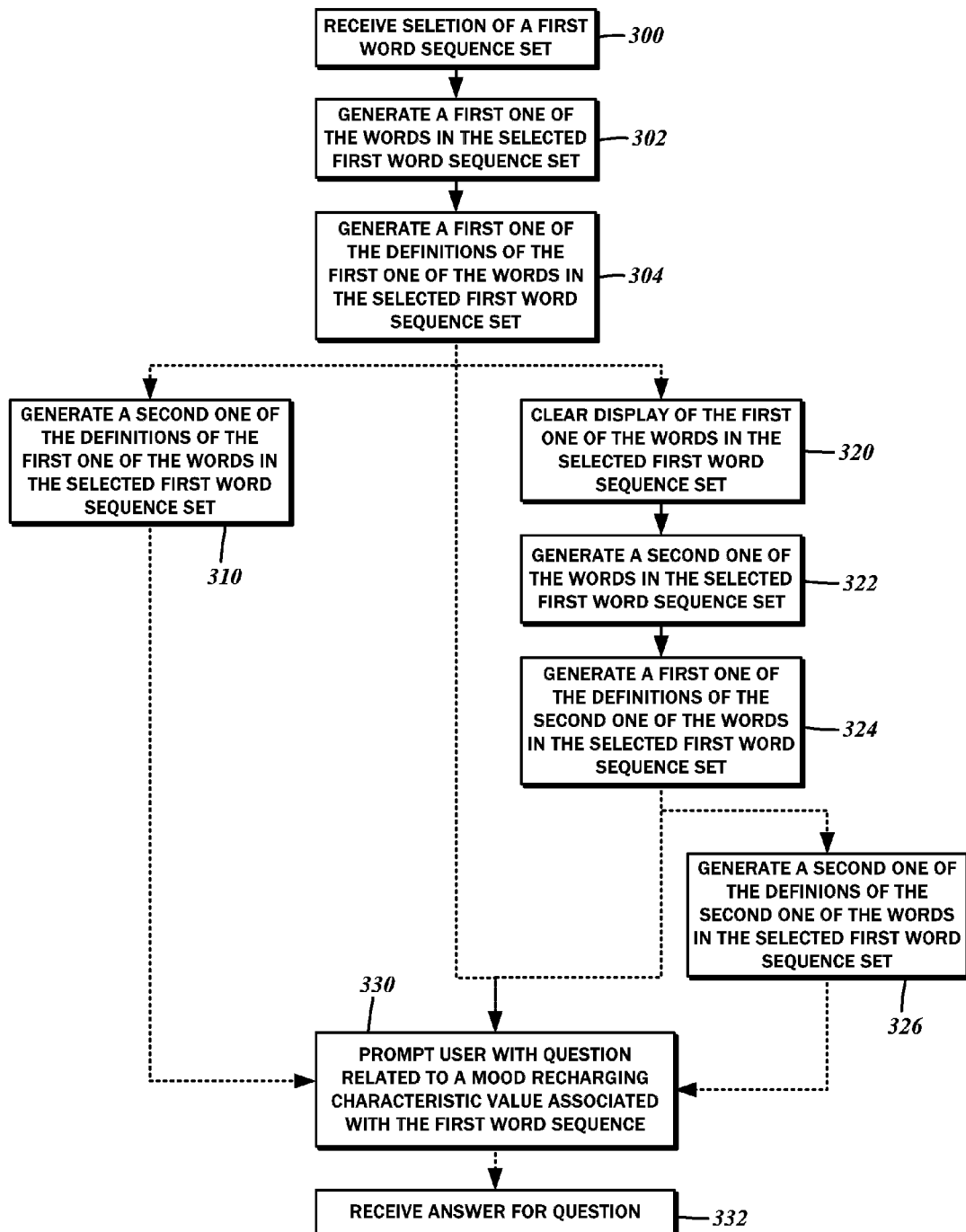


FIG. 3

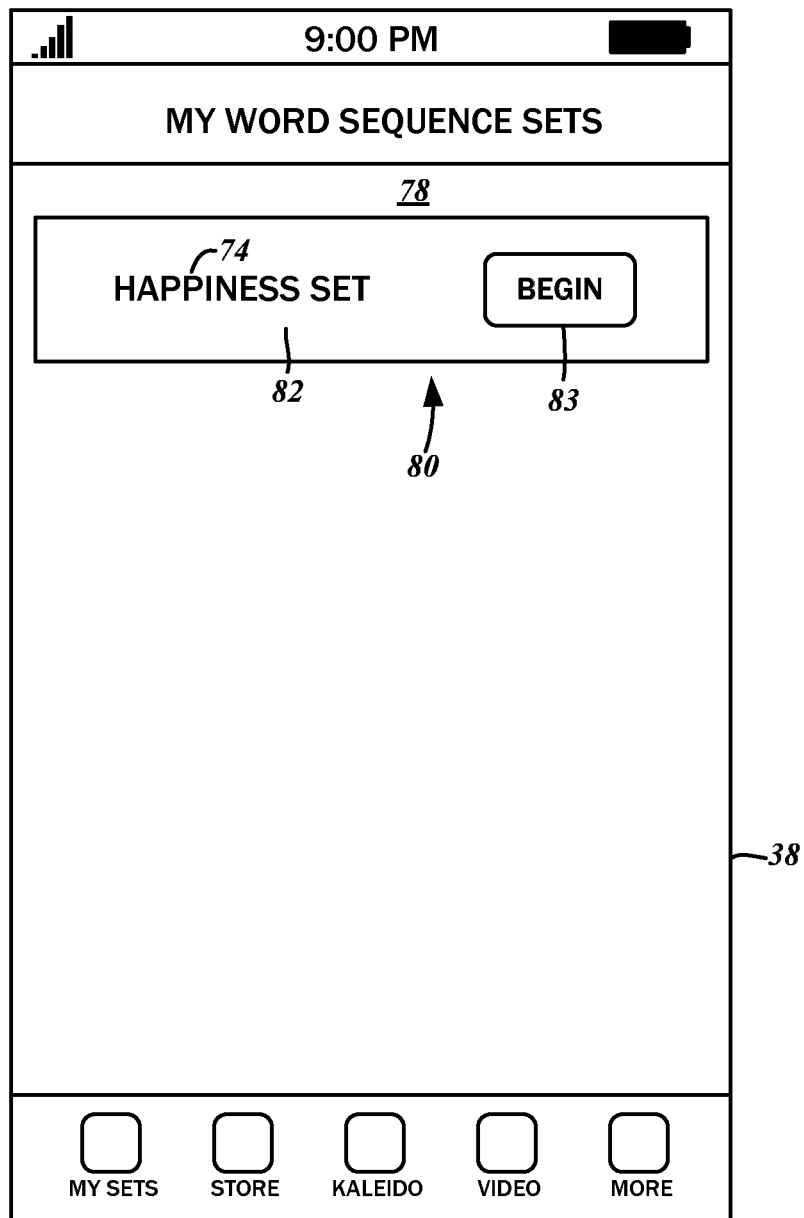


FIG. 4

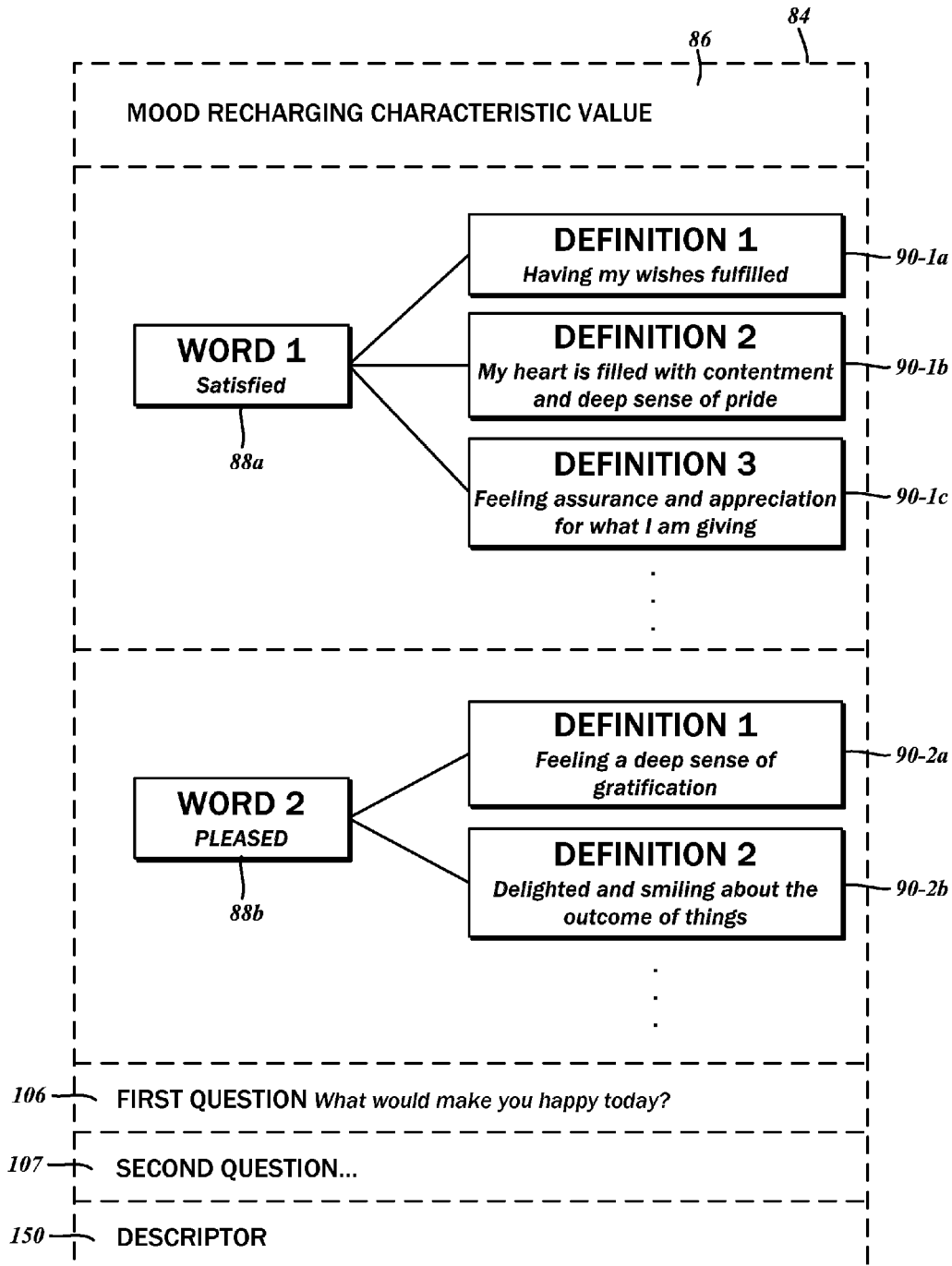


FIG. 5

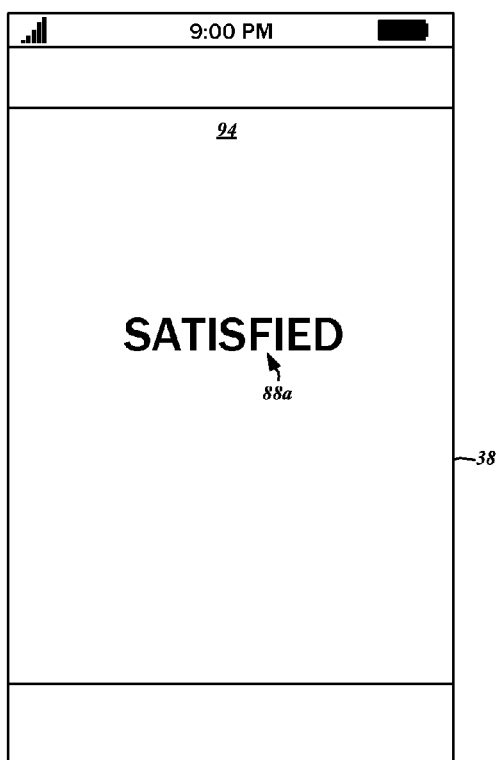


FIG. 6A

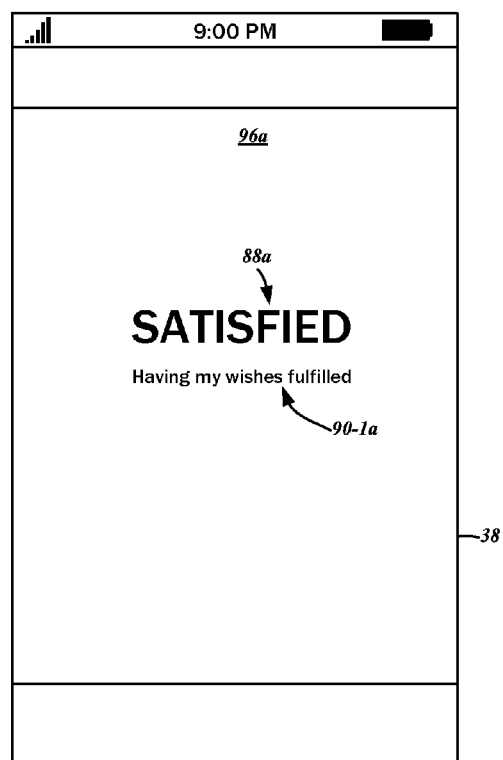
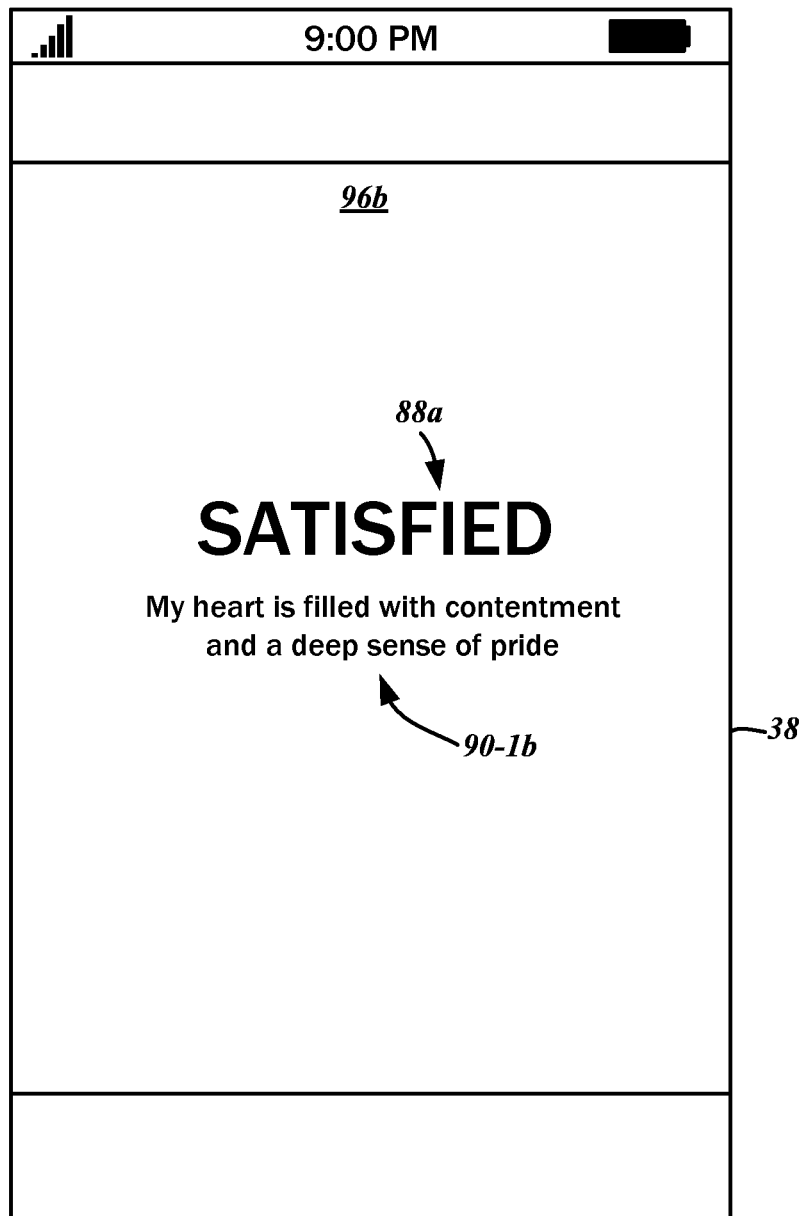


FIG. 6B

**FIG. 6C**

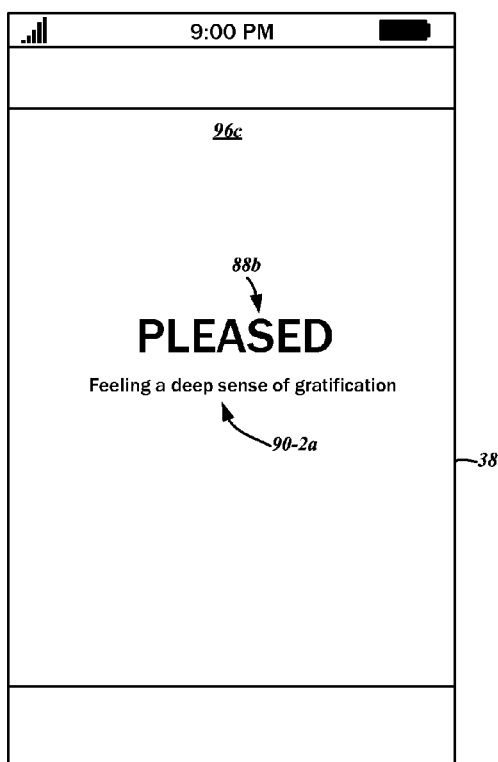


FIG. 6D

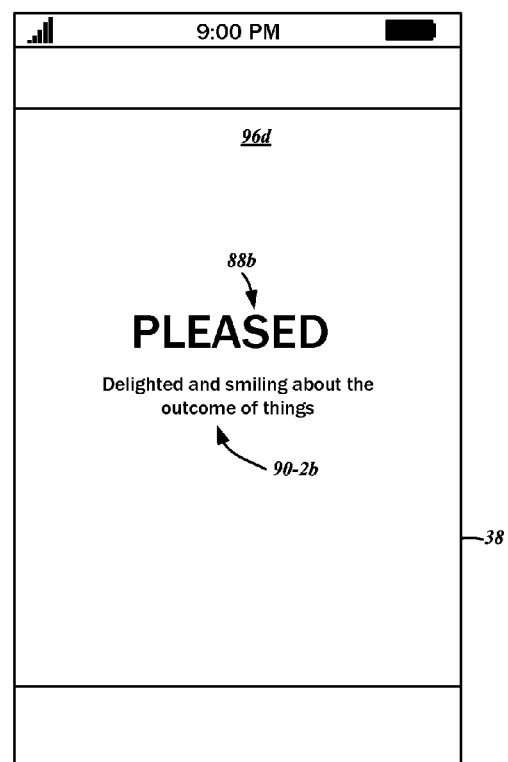


FIG. 6E

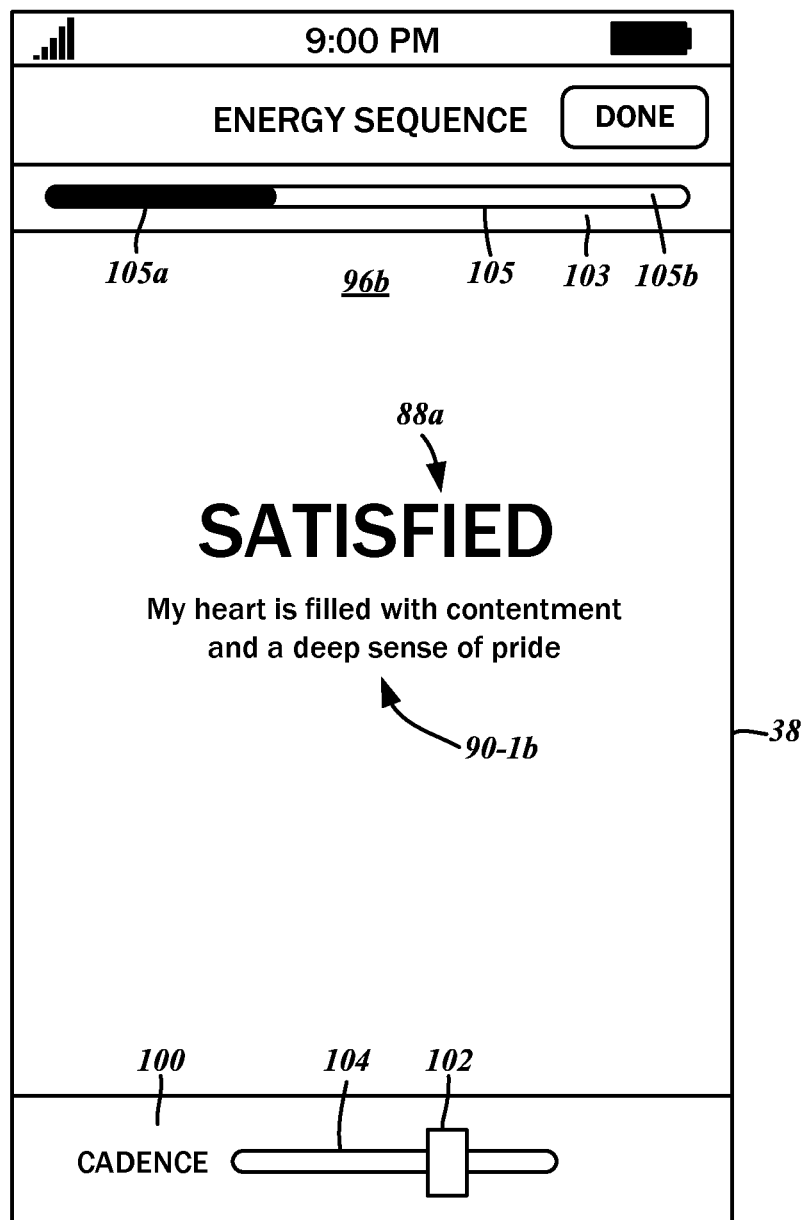


FIG. 7

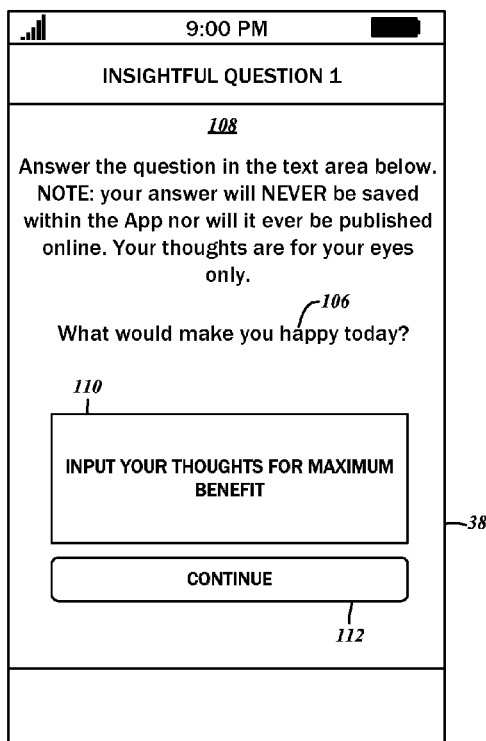


FIG. 8A

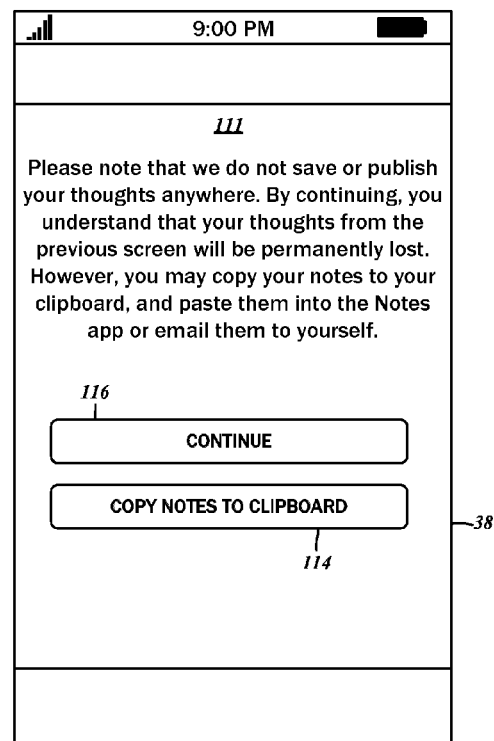


FIG. 8B

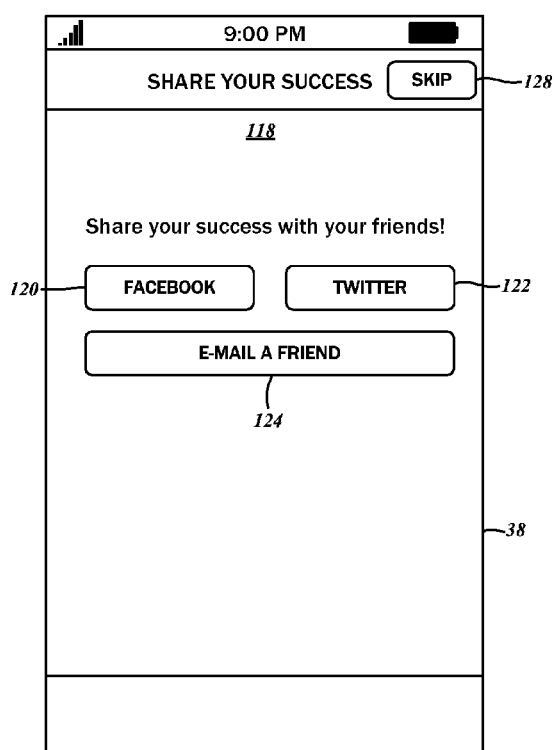


FIG. 9A

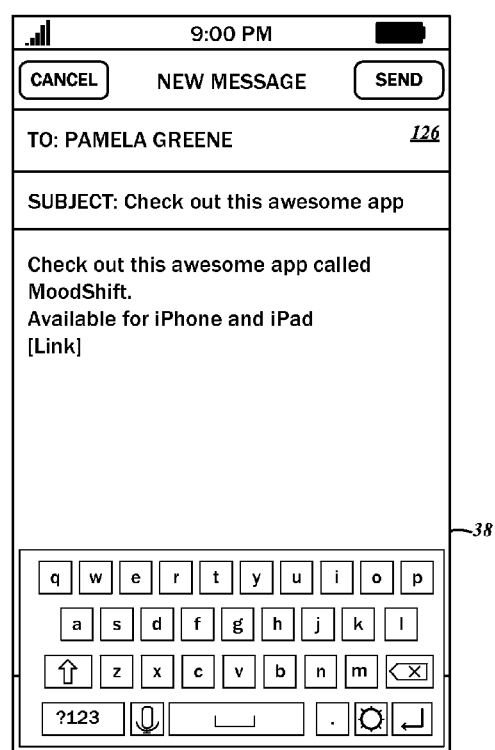
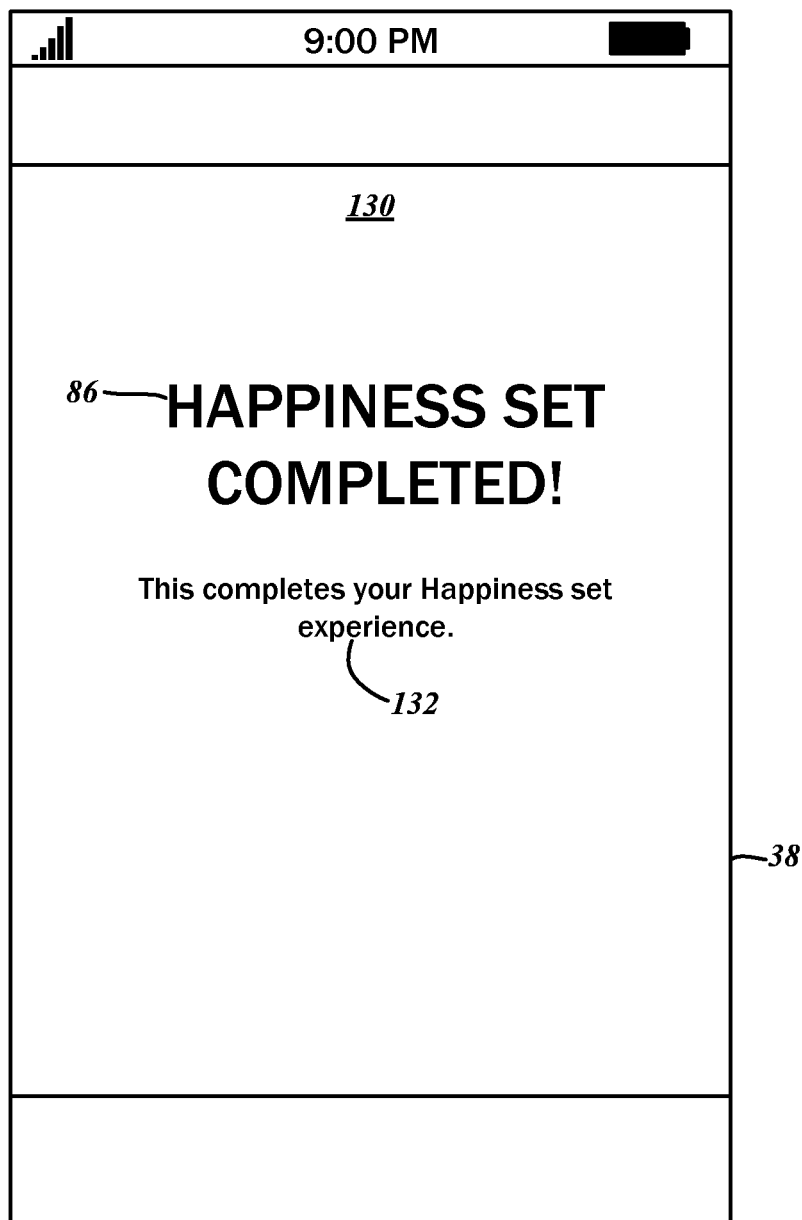


FIG. 9B

**FIG. 10**

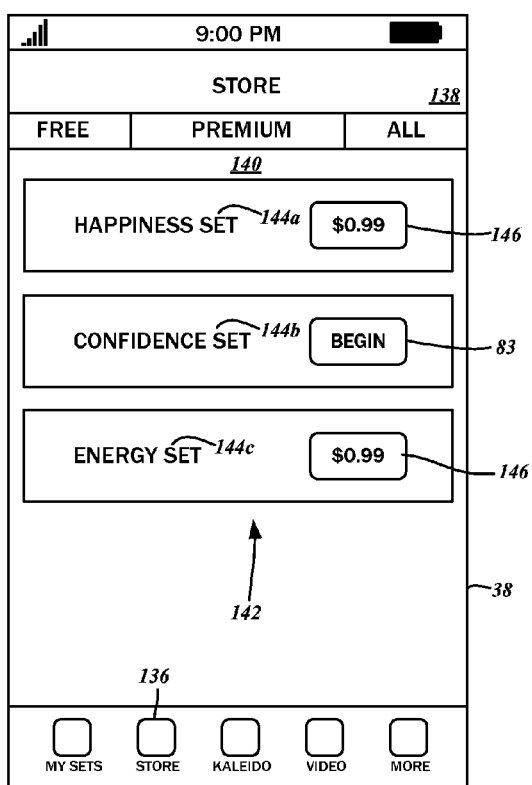


FIG. 11

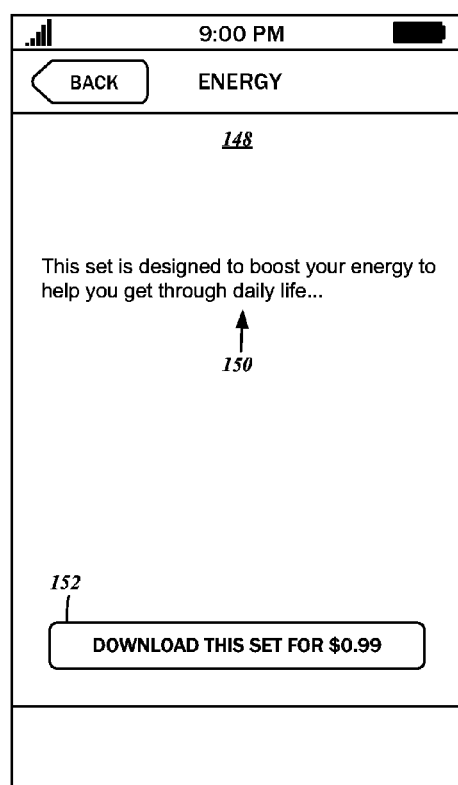


FIG. 12

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# SHIFTING AND RECHARGING OF EMOTIONAL STATES WITH WORD SEQUENCING

## CROSS-REFERENCE TO RELATED APPLICATIONS

Not Applicable

## STATEMENT RE: FEDERALLY SPONSORED RESEARCH/DEVELOPMENT

Not Applicable

## BACKGROUND

### 1. Technical Field

The present disclosure relates to mood improvement techniques, and more particularly, to personalized word sequencing methods and systems in accessible devices for shifting and recharging emotional states.

### 2. Related Art

Contemporary life in all but the most secluded places far from civilization tends to be a chaotic and turbulent experience that places a tremendous amount of stress and anxiety on the individual. Although the harm to emotional well-being that results from major calamities and stressors such as natural disasters, recessions, terrorism, crime, and the like cannot be marginalized, daily demands of the workplace and of the home are significant sources of emotional unrest. For instance, workers are universally under pressure to handle increasing workloads with fewer resources, with ever-decreasing time away from the job to adequately decompress and recharge one's emotions. The problem of occupational stress can be exacerbated by toxic work environments, bullying and harassment, and other inter-personal conflicts with colleagues at various levels. Further, upon leaving work at the end of the day, there may be additional stressors such as family care obligations and tedious household tasks. What should otherwise be a relaxing experience in watching television programs or consuming media such as newspapers and magazines may be agitating and demoralizing at the same time because of all of the negativity expressed therein. Hurtful and egregious comments are not limited to the media, and can come from anyone within an individual's sphere of influence including family, friends, and acquaintances.

What the foregoing amounts to, is a constant, never-ending accumulation of emotional turmoil leading to confusion, disappointment, fear, and unhappiness, the likes of which have a debilitating effect on the homeostasis of humankind. Well understood and documented in the medical literature, emotional unrest induced by acute stressors activates neuronal communications between the heart and the brain. The heart is now considered by many scientists and neurocardiologists to be the primary receptive organ of incoming stressors. The biochemical reactions that follow as a result of incoming stressors may result in the classic "fight or flight" systemic reaction experienced by the body. This reaction causes significant changes in heart rate variability, blood pressure, breathing patterns, hormonal secretions, and sleep patterns affecting every organ system in the body. Acute and chronic emotional unrest suppresses the immune system, rendering an individual more susceptible to common diseases. Examples of unhealthy states associated with emotional unrest are gastrointestinal problems, headache syndromes and assorted back pain syndromes. Significant suppression of

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the immune system will hinder repair of mutated DNA, which has been linked to the development of cancer.

Aside from the aforementioned somatic effects, emotional unrest is known to be the cause of depression, alcoholism and other substance abuse, and suicide, among many others. It is also known to trigger the onset of schizophrenia, manic episodes, and various psychotic disorders.

Unfortunately, due to the lack of time, energy, and escalating healthcare costs, many individuals suffering under the burdens of emotional unrest neglect to seek assistance. In many cases, the individual is too embarrassed or ashamed due to the instilled belief that one is not mentally strong or resilient enough to deal with the stress, and continues to suffer in silence. To the extent professional help is sought, psychiatry and its related disciplines are increasingly relying upon psychopharmacology to manage emotional unrest. The mechanism-of-action of these drugs is not well understood and is currently being challenged. Problematically, the ineffectiveness of these drugs as reported by researchers, coupled with the serious warnings of possible suicidal and homicidal ideation, raises questions of sustainability.

Accordingly, there is a need in the art for an affordable, mobile, non-drug, rapid delivery modality to impact emotional turmoil. There is a need in the art for systems and methods that target emotional conditions, and are readily accessible for individuals engaged in busy lifestyles.

## BRIEF SUMMARY

In accordance with one embodiment of the present disclosure, a method for shifting and recharging an emotional state of a user with word sequencing is contemplated. With the disclosed method, it is possible to "recharge" the user's emotions as a first step toward impacting emotional unrest. The method may be embodied as computer or data-processor-executed instructions that may be run on a mobile device and is therefore readily accessible by the user anywhere. The word sequencing may be presented on a data processing apparatus with a display and an input.

The method may include a step of receiving a selection of a first word sequence set from the user through the input of the data processing apparatus. The word sequence set may be defined by a mood recharging characteristic value. Additionally, the first word sequence set may include a plurality of words each with at least one corresponding definition. The method may continue with generating a first one of the plurality of words in the selected first word sequence set on the display. The first one of the plurality of words may be displayed with a first predefined typeface. The method may also include generating on the display a first one of the at least one corresponding definition of the first one of the plurality of words in the first word sequence set. The definition may be displayed with a second predefined typeface, while the first one of the plurality of words remains generated on the display. The definition may remain displayed for a time duration corresponding to a predefined cadence rate value.

Following these two steps, the method may include prompting the user with a question related to the mood recharging characteristic value. The question may also be associated with the first word sequence set.

The present disclosure will be best understood by reference to the following detailed description when read in conjunction with the accompanying drawings.

## BRIEF DESCRIPTION OF THE DRAWINGS

These and other features and advantages of the various embodiments disclosed herein will be better understood with respect to the following description and drawings:

FIG. 1 is a block diagram illustrating an exemplary environment in which various embodiments of the present invention may be implemented, including a data processing apparatus;

FIG. 2A is an example user interface showing an introductory screen;

FIG. 2B is an example user interface showing a login screen;

FIG. 2C is an example user interface showing a password recovery screen;

FIG. 3 is a flowchart illustrating one embodiment of a method for shifting and recharging an emotional state of a user with word sequencing;

FIG. 4 is an example user interface showing a word sequence set selection screen;

FIG. 5 is a data structure diagram of word sequence sets in accordance with one embodiment of the present disclosure;

FIG. 6A-6E show an example user interface variously displaying a word display screen, a first word and definition combination display screen, and a second word and definition combination display screen, a third word and definition combination screen, and a fourth word and definition combination screen;

FIG. 7 is an example user interface showing the word and definition combination display screen with a cadence change overlay and a word sequence overlay;

FIG. 8A-8B shows an example user interface with a question display screen and a confirmation screen;

FIG. 9A-9B shows an example user interface with a sharing screen, and an input screen;

FIG. 10 shows an example user interface with a final confirmation screen;

FIG. 11 shows an example user interface with a purchase or store screen; and

FIG. 12 shows an example user interface with a word sequence set description screen.

Common reference numerals are used throughout the drawings and the detailed description to indicate the same elements.

### DETAILED DESCRIPTION

The detailed description set forth below in connection with the appended drawings is intended as a description of the presently contemplated embodiments of methods and systems for shifting and recharging an emotional state of a user. This description is not intended to represent the only form in which the disclosed invention may be developed or utilized. The description sets forth the functions and features in connection with the illustrated embodiments. It is to be understood, however, that the same or equivalent functions may be accomplished by different embodiments that are also intended to be encompassed within the scope of the present disclosure. It is further understood that the use of relational terms such as first and second and the like are used solely to distinguish one from another entity without necessarily requiring or implying any actual such relationship or order between such entities.

Generally, the methods for shifting and recharging emotional states relies upon word sequencing techniques, in which the user is shown a series of words to affect emotional changes. In particular, the presently contemplated methods target emotions and help “shift and recharge” the user’s emotions. While these methodologies are not intended to provide an escape from negative emotion, it is contemplated to utilize such negative emotion as a pathway to its positive counter-

part, creating a better mood for the user. Such shifts in mood are immediate, and are envisioned to be sustainable with repeated use.

With reference to the block diagram of FIG. 1, one exemplary environment 10 in which embodiments of the present disclosure may be implemented is illustrated. As will be described in further detail, much of the interaction for mood shifting and recharging purposes is between a user 12 and a data processing apparatus 14. However, there are peripheral components that play different roles to provide additional functionality. It is contemplated that the data processing apparatus 14 is a mobile data communications device such as a smart phone capable of running software programs, variously referred to in the art as applications, apps, and so forth. Accordingly, at minimum, the data processing apparatus 14 includes a processor 16 that executes a series of preprogrammed instructions that generate certain outputs in response to inputs. These instructions are understood to embody a series of steps that comprise one method for shifting and recharging the emotional state of the user 12. These instructions may be stored in an on-board memory 18 connected to the processor 16.

There are several input and output devices typically included in a mobile data communications device. For instance, there is a display 20 that generates a graphical output from the processor 16. Such outputs are understood to be in response to the execution of the aforementioned preprogrammed instructions. The display 20 is a color liquid crystal display (LCD) device comprised of a plurality of rows and columns of individually activatable pixels.

Since the exemplary data processing apparatus 14 is a smart phone, an audio output device 22 is also contemplated. The audio output device 22 may include a converter that translates a stream of data output by the processor 16 into an audio signal. Additionally, the audio output device 22 may include a transducer that produces sound in response to the audio signal. The execution of the instructions may be invoked or modified via inputs from the user 12 through an input device 24.

Many conventional smart phones utilize a touch screen that is overlaid on the display 20, and taps and other well-known touch inputs at specific locations along the input device 24 corresponding to different positions of graphical user interface elements shown on the display 20 may activate functionality associated therewith. One possible graphical user interface is the virtual keyboard, which is a graphical arrangement of keys for alphanumeric characters, and tapping on a portion of the screen is operative to select or enter that character.

Being a mobile communications device, the data processing apparatus 14 is also understood to include a communications module 26 that is connected to an antenna 28 as well as the processor 16. As will be recognized by those having ordinary skill in the art, the communications module 26 may include an analog/digital converter circuit that, in transmit operations, converts a data stream from the processor 16 to an analog signal. A radio frequency (RF) carrier signal is then applied to the analog signal, amplified, and passed to the antenna 28, which transduces the electrical signal to an electromagnetic radio frequency signal that propagates through the air. The opposite occurs on the receive end with another wireless communications module 30, in which the electromagnetic radio frequency signal 32 passed from an antenna 34 is transduced to an electrical signal and then amplified. The RF carrier signal is removed, and the resulting analog signal is converted to a digital data stream by a digital/analog converter circuit and is passed to another module for further

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processing. Both of the illustrated wireless communications modules **26, 30** are understood to be capable of bi-directional communications.

In accordance with one embodiment of the present disclosure, through the aforementioned wireless data communications link a connection to the Internet **36** can be established from the data processing apparatus **14**. As will be described more fully below, the connection to the Internet **36** is utilized to link the data processing apparatus **14** to various servers also connected to the Internet **36** and provide additional functionality to the presently disclosed method for shifting and recharging the emotional state of the user **12**. For these purposes, standard TCP/IP (transmission control protocol/Internet protocol) transport modalities may be used, along with higher level communications utilizing HTTP (Hyper Text Transfer Protocol) as well as any other suitable inter-process communications modality. The wireless data communications link may be of a relatively short distance as would be the case with WiFi/802.11x, or of further distances and greater coverage area as would be the case with cellular data networks. A variety of standards exist, including GSM (Global System for Mobile Communications), WCDMA (Wideband Code Division Multiple Access) and so forth. Any type of wireless communications modality may be utilized to establish the data communications link to the Internet **36**, though it is understood that both the wireless communications module **30** of the data processing apparatus **14** and the remote wireless communications module **30** utilize the same standards to ensure compatibility.

It is to be understood that the foregoing details pertaining to the data processing apparatus **14** and the components part of the communications link to the Internet **36** are presented by way of example only and not of limitation. Furthermore, it is to be understood that only those components that are pertinent to the following discussion of the presently contemplated method and system for enhancing emotional state are shown. Those having ordinary skill in the art will recognize that typical mobile communications devices include many other components that have not been mentioned, and such omissions are not understood to be limiting.

As indicated above, one embodiment of the present disclosure contemplates the system and method for shifting and recharging the emotional state of the user **12** being implemented as a software application that runs on the data processing apparatus **14**, and FIG. 2A and FIG. 2B are an exemplary user interface **38** thereof. The data processing apparatus **14** is understood to run an operating system that controls the aforementioned input and output devices, as well as to provide a unified user interface. One of the unified elements is a top bar **40** with a wireless communication link strength icon **42**, a clock **44**, and a battery power indicator icon **46**. The foregoing is presented by way of example only, and other operating systems of different data processing apparatuses **14** may utilize different graphical user interfaces.

Specifically, the example screen shown in FIG. 2A is an introductory screen **49** that is displayed upon invoking the software application. Various graphics such as logos **48** may be generated on the user interface **38**, along with some introductory text **50**. The user **12** may select a start button **52** to continue.

Personalization of the various functions and features of the software application is contemplated. In some cases, the identity information may be stored locally on the data processing apparatus **14**, but in others this data may be stored remotely. With reference again to the block diagram of FIG. 1, one of the remote systems connected to the Internet **36** is an application support system **54**, on which personal account data

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may be stored. More particularly, there may a server computer system **56** connected to a database **58**, though this is by way of example and any other implementation of the application support system **54** may be utilized. Referring back to FIG. 2A, to load the various personalization variables, a login function may be invoked via a login button **63**.

Now referring to FIG. 2B, invoking the login button **63** on the introductory screen **49** shown in FIG. 2A results in a login screen **59** being generated in the user interface **38**. It is also possible to return to the introductory screen **49** by activating a back button **51**. Whether the personal account data is stored on the data processing apparatus **14** or on the application support system **54**, one of the ways in which the account is accessed is by supplying an email address in an input box **60** therefor, and a password similarly in an input box **62** therefor. Upon the user **12** entering the email address and password, a login button **63** may be invoked to complete the account login process. If the user has forgotten the correct password, it may be recovered by selecting a password recovery link **64**. This results in a password recovery screen **66** being generated in the user interface **38** as shown in FIG. 2C. The email with which the account was created can be entered in another email input box **68**, and a temporary password along with instructions on resetting the password may be sent thereto upon invoking a send button **70**. To cancel the password reset process, a return/login button **72** may be invoked to return to the login screen **59** shown in FIG. 2B.

However, referring additionally to the block diagram of FIG. 1, it is understood that an account established on a social networking service site **74** may also be utilized to access the personal account data. One of the most popular social networking services is Facebook, which can be accessed via a first social networking site login button **76a**, while Twitter is another, and can be accessed via a second social networking site login button **76b**. As will be recognized by those having ordinary skill in the art, the social network service site **74** maintains an extensive volume of user information, and can be utilized as credentials to access other services and data, including the presently contemplated application support system **54** and the personal account data stored thereon.

With reference to the flowchart of FIG. 3, the method may begin with a step **300** of receiving a selection of a first word sequence set. In the embodiment of the present disclosure implemented as a software application running on the data processing apparatus **14**, this selection may be received via a word sequence set selection screen **78** shown in FIG. 4. More particularly, the word sequence set selection screen **78** includes a listing **80** of available word sequence sets stored on the data processing apparatus **14** each represented as a list element **82**. Each list element **82** is delineated with a word sequence set descriptor **79**. The next step in the method may be initiated upon a user activation of a begin button **83**.

Generally, a word sequence set is understood to be a collection of words each having one or more corresponding definitions. The data structure diagram of FIG. 5 illustrates one exemplary embodiment of a first word sequence set **84**, which may be defined by a mood recharging characteristic value **86**. This may be a short descriptor that briefly sets forth the mood shifting and recharging objective of the word sequence set **84**, and may be utilized for the word sequence set descriptor **150** in the listing **80** discussed above. One example mood recharging characteristic value **86** may be "Happiness." The first word sequence set **84** includes multiple words **88**, including a first word **88a**, and a second word **88b**. It will be recognized that the word sequence set **84** may include additional words **88**, though in the example there are only two. The mood recharging characteristic value **86** is understood to

define the overall theme or characteristic that is shared amongst the plurality of words **88**.

By way of example, the first word **88a** may be "Satisfied" and the second word **88b** may be "Pleased," both of which are related to the "Happiness" mood recharging characteristic value **86**. There may be additional word sequence sets **84** with a corresponding mood recharging characteristic value **86** such as "Confidence" and "Energy," that are understood to include words **88** that fit the respective themes. Each word in the word sequence set **84**, in turn, has at least one corresponding definition **90**. For example, the first word **88a** may have a first definition **90-1a** with a value of "having my wishes fulfilled," a second definition **90-1b** with a value of "my heart is filled with contentment and a deep sense of pride," and a third definition **90-1c** with a value of "feeling assurance and appreciation for what I am giving." For the second word **88b**, there may be a first definition **90-2a** with a value of "feeling a deep sense of gratification," and a second definition **90-2b** with a value of "delighted and smiling about the outcome of things." As with the variable number of words **88** in the word sequence set **84**, there may be a variable number of definitions **90** for each word **88**.

The definition **90** for a given word **88** is not a "definition" in the strictest sense, but rather, a related concept that could be associated with the word **88**. Along these lines, although the word **88** is a single, standalone word in the illustrated example, it may also be a short phrase or multiple words. The combination of the word **88** with the definitions **90** is contemplated to stimulate emotional activity relating to the subjects thereof, and influence thought in a manner that recharges the emotions of the user **12**. Therefore, possible envisioned uses for the application include boosting confidence of the user **12** before a romantic date, a business meeting, or an exam and providing encouragement before a challenging situation. Additionally, when the user **12** needs emotional recharging, including but not limited to increased energy, and inspiration or encouragement, the application can be initiated. It will be appreciated that an infinite number of the words **88** and the corresponding definitions **90** may be provided to further tailor the mood improvement objectives of the application to an ever-increasing number of users **12**. The example words **88** and definitions **90** presented herein are not intended to be limiting, and any other suitable content may be utilized.

The first word sequence set **84** is understood to be stored on the data processing apparatus **14**. It is also contemplated, however, that periodic updates may be made to the word sequence sets **84** and made available on the application support system **54**. Accordingly, prior to proceeding to the next step in the method, the application support system **54** may be queried to determine whether any updates are available. The possible type of updates may include additions, replacements, or deletions of any one of the definitions **90**, as well as additions and deletions of any one of the words **88**. If any exist, those updates are downloaded applied to the locally stored copy of the word sequence set **84**. In cases where the update revises one of the definitions **90**, it may be so specified within the update that it is to replace the existing one with the updated one. Similarly, additional definitions **90** to a particular one of the words **88** may also be specified as adding to, rather than replacing, an existing one. Updates to the words **88** are understood to be processed in a similar manner. Those having ordinary skill in the art will appreciate several different update methodologies that may be used to implement the foregoing features.

Returning to the flowchart of FIG. 3, the method continues with a step **302** of generating a first one of the words **88** on the display **20** of the data processing apparatus **14**. An example of

how this may be implemented in the application is shown in FIG. 6A, which depicts a word display screen **94**. Per the foregoing example of the first word sequence set **84**, the first word **88a**, "Satisfied" is generated on the word display screen **94**. The first word **88a** is generated with a first predetermined typeface, which may be defined by either a typeface size, typeface style, or typeface enhancement such as underline, bold, italic, and so forth. Although the example shows the first word **88a** being generated on the word display screen **94**, the order of displaying the words **88** may be randomized, and may begin with any one of the other words in the word sequence set **84**. Additionally, various transition effects involving the introduction of the first word **88a** on to the word display screen **94** are possible.

As indicated above, the step **302** can be initiated based upon user input from the word sequence set selection screen **78**, and in particular by, invoking the begin button **83** generated thereon. However, it is also contemplated that the step **302** can be initiated by other modalities not reliant on input from the user **12**. In one embodiment, it is possible to set a time and/or date notification within the application, such that when the actual time and/or date matches that of the set notification, the application starts and proceeds to the step **302** of generating the first one of the words. This may be particularly useful for those users **12** that are preparing for a business meeting or an exam that is at a set time, and the notification is set to a time or date before that scheduled event. As such, the user **12** can be automatically notified. Another embodiment contemplates a similar initiation modality, but utilizes an on-board GPS (global positioning system) receiver **27** instead. It will be recognized by those having ordinary skill in the art that the GPS receiver **27** reports the actual coordinates of the location in which the data processing apparatus **14** is disposed. Thus, the application may be set to initiate the step **302** when the reported coordinates are proximal to that of a predefined location. This may also be referred to as a geographic notification. For example, the predefined location may be set to a public venue in which the user **12** is scheduled to speak. When the user **12** approaches that venue, positive emotional encouragement may be provided to help overcome fears of public speaking via the contemplated mood shifting and recharging methods implemented in the application. As utilized herein, the term notification may refer to any modality by which the user **12** is informed of a triggering condition, including push notifications, alarms, alerts, and any other suitable modalities available through the data processing apparatus **14**. Along these lines, unique tones, sounds, or other audio may also be generated concurrently with the notifications.

Next, the method proceeds to a step **304** of generating on the display a first one of the corresponding definitions **90** for the selected or displayed word in step **302**, e.g., the first word **88a**. In accordance with one embodiment of the present disclosure, this occurs in a first word and definition combination display screen **96a** as shown in FIG. 6B, and the display of the first word **88a** thereon is maintained. In other words, the first definition **90-1a** is generated on the display **20** while the first word **88a** remains generated on the same. The particular definition **90** that is shown in conjunction with the first word **88a** may be randomized, and any other definition **90** corresponding to the first word **88a** may be generated instead. The display of the definition **90** is contemplated to be with a second predetermined typeface that has its specific typeface size, typeface style, or typeface enhancement. Any one of these characteristics may be varied from that of the first predetermined typeface mentioned above in relation to the display of the word **88**. In the illustrated example, the defini-

tion **90** is generated with a smaller typeface size than that of the corresponding word **88**. However, this is by way of example only and not of limitation, and any other suitable visual effects may be made, or may be kept the same, depending on the embodiment.

The first definition **90-1a** remains displayed for a time duration that corresponds to a predefined cadence rate value. Preferably, though optionally, the time duration is understood to be approximately five seconds, though it can be as short as three seconds. The upper limit of the time duration is understood to be ten seconds, though this is by way of example only. Any other upper limit may be substituted without departing from the scope of the present disclosure. The cadence rate value, and hence the time duration, can be modified by the user. As best shown in FIG. 7, a cadence change overlay **100** is generated in response to any touch input while either word display screen **94** or the word and definition combination display screen **96** is being presented in the user interface **38**. More particularly, the cadence change overlay **100** includes a sliding button **102** that can be moved along a cadence bar **104**. Depending on the specifics of the implementation, the far right position of the sliding button **102** along the cadence bar **104** may represent the fastest cadence, i.e., the lowest delay (three seconds), while the far left position of the sliding button along the cadence bar **104** may represent the slowest cadence, i.e., the highest delay (ten seconds). Notwithstanding the foregoing example, other user interface elements through which variables can set may be substituted.

Another feature that is invoked upon providing a touch input while the word display screen **94** or the word and definition combination display screen **96** is being presented on the user interface **38** is a progress overlay **103** including a progress bar **105**. Although only a single word-definition shift and recharge sequence has been illustrated above, according to some embodiments, a complete shift and recharge sequence may be comprised of multiple words **88** and multiple definitions **90** being presented to the user **12**. In this regard, the progress bar **105** is understood to record the progress of a started shift and recharge sequence and present a visual representation thereof having a completed portion **105a** and an uncompleted portion **105b** that has a different appearance than the completed portion **105a**. Preferably, the progress through a shift and recharge sequence is not recorded from one instance of the application to another, but other embodiments do contemplate its possibility. Furthermore, the user **12** is expected to progress through the shift and recharge sequence from start to finish without skipping, and so the progress bar **105** may not accept any user input that shifts the order or timing of the word display screen **94** and/or the word and definition combination display screen **96**. There are alternative embodiments, however, where such shifts are possible.

Following the step **304** discussed above, the execution of the method may diverge to different branch steps. One of these is a step **310** of generating a second one of the definitions, e.g., the second definition **90-1b** for the first word **88a**, on the display **20**. An example is shown in FIG. 6C, which shows the user interface **38** displaying a second word and definition combination display screen **96b**. Like the first definition **90-1a** discussed above, the display of the second definition **90-1b** is contemplated to be with the second predetermined typeface, and remains displayed for the same time duration. Prior to displaying the second definition **90-1b**, the first definition **90-1a** is cleared from the second word and definition combination display screen **96b**. As indicated above, each word **88** may have a variable number of defini-

tions **90**. In accordance with one embodiment of the present disclosure, three definitions **90** may be presented for each word **88**, though this may be varied.

After presenting the selected definitions **90** for the first word **88a**, instead of presenting another definition for the same word, the method may proceed to generate a different, second word **88b** and the corresponding definitions therefor. More particularly, this may involve a step **320** of clearing the display of the first word **88a**. With reference to a third example word and definition combination display screen **96c** shown in FIG. 6D, this clearing step may be followed by a step **322** of generating a second one of the words **88**, i.e., the second word **88b**, on the display **20** of the data processing apparatus **14**. Continuing with the foregoing example, the second word **88b** is "Pleased." Again, the second word **88b** is generated with the first predetermined typeface.

Thereafter, the method may continue with a step **324** of generating a first one of the definitions **90** of the second word **88b**, that is, the first definition **90-2a**. This, by way of example, is "feeling a deep sense of gratification" for the second word **88b** "Pleased." Like the other presentations of the definition **90**, the first definition **90-2a** is generated in the second predetermined typeface, and only for a limited period as governed by the time duration corresponding to the cadence rate value.

Once the time duration for displaying the first definition **90-2a** has elapsed, the method may proceed to a step **326** of generating a second definition **90-2b** for the second word **88b**. This is understood to be generated on a fourth word and definition combination display screen **96d** shown in FIG. 6E. According to the illustrated example, the second definition **90-2b** is "delighted and smiling about the outcome of things." Similar to the first definition **90-2a**, the **90-2b** is generated with the second predetermined typeface.

Different words **88** and corresponding definitions **90** may thus be generated on the display **20** in sequence. In one embodiment of the present disclosure, the number of words **88** generated and the number of corresponding definitions **90** generated is predefined, for example, six words, three definitions each, though which of the specific words **88** and definitions **90** are to be presented may be randomized at the time of running the application. The above-described steps in the method for shifting and recharging the emotional state of the user **12** is repeated for those additional words **88** and definitions **90** of the selected word sequence set **84**.

Following the completion of the word-definition display sequence, whether following step **304**, step **310**, or step **326**, the method may proceed to a step **330** of prompting the user **12** with a question related to the mood recharging characteristic value **86** of the first word sequence set **84**. Referring back to the data structure diagram of FIG. 5, the word sequence set **84** also includes a question **106**, which may ask, for example "What would make you happy today?" With reference to the example user interface **38** shown in FIG. 8A, the question **106** may be presented in a question display screen **108**. Displayed within the question display screen **108** is the question **106**, as well as a text input box **110**.

The purpose of the question **106** is envisioned to sustain the shift and recharge of the mood of the user **12** following the mostly passive reception of the word-definition sequence in previous steps. The associations created as a result of the generated sequence of the word **88** and the definition **90** is further reinforced by the user **12** with question **106**, creating a personal link, association, or connection, therefore creating sustainability of the mood shift and recharge. Due to the open-ended, probing nature of the question **106**, they may also be referred to as insightful questions. Although a single

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question 106 is shown associated with the word sequence set 84, there may be additional ones, and may be selected at random in relation to the step 330. In addition, there may be a second question 107 that can be presented to the user 12 independent of the step 330, to further advance the sustainability of the mood shift and recharge. This question may not necessarily relate to the specific word 88 that has been presented, but relate overall to the word sequence set 84. The aforementioned procedures of updating the various components of the word sequence set 84 are understood to be applicable to the question 106 as well.

The method continues with an optional step 332 of receiving a user-supplied answer to the question 106. The answer is provided by the user 12 via the text input box 110, and upon completion, the next step in the process may be invoked by pressing a continue button 112. The answer to the question 106 is not retained in various embodiments, though it is possible to do so if desired or warranted. With reference to FIG. 8B, the user 12 is warned of the fact that the answer to the question 106 is not retained or otherwise saved in a confirmation screen 111. However, if desired for journal keeping purposes, the answer may be copied to the system clipboard by invoking a copy button 114. Otherwise, the next step in the application is invoked by a continue button 116.

One embodiment contemplates a sharing functionality by which the user 12 can announce to friends and acquaintances on various social networking sites 74 that a word sequence set has been completed. As best shown in the exemplary user interface 38 shown in FIG. 9, there is a sharing screen 118 with a first button 120 to invoke sharing functions in relation to a first social networking site, a second button 122 to invoke sharing functions in relation to a second social networking site, and a third button 124 to invoke e-mail sharing functions. Upon selecting one of these first, second or third buttons 120, 122, 124, a corresponding input screen particular to that sharing feature may be generated in the user interface 38 to accept input or confirm a default message. Those having ordinary skill in the art will recognize the numerous possible implementations of the input screen.

The sharing step may be skipped, and this option is possible by invoking a skip button 128. Whether the completion message is shared or not, however, execution proceeds to a final confirmation screen 130 shown in FIG. 10. Therein the mood recharging characteristic value 86 is mentioned to identify the particular word sequence set 84 that the user 12 has completed. Additionally, there is a congratulatory message 132.

Referring back to the word sequence set selection screen 78 of FIG. 4, it is understood that the listing 80 includes the word sequence sets 84 stored on the data processing apparatus 14. According to various embodiments of the present disclosure, it is possible to purchase additional word sequence sets 84 provided by the application support system 54. As shown in the block diagram of FIG. 1, the provider of the data processing apparatus 14 typically maintains an application distribution system 134 with a catalog of available software programs for download. Some of the programs are sold, so there may be a payment processing system 136. In order to purchase additional word sequence sets 84, the request may be first routed through the third-party application distribution system 134. The payment may be remitted from the data processing apparatus 14 to the payment processing system 136, and upon successful payment/authorization, directs the application server system 54 to transmit the purchased word sequence set 84. A variety of secure methods for processing payment are known in the art, and any one may be substituted without departing from the scope of the present disclosure.

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From the word sequence set selection screen 78, a store icon 136 may be invoked to show the available word sequence sets 84 available for purchase. More particularly, as shown in FIG. 11 a purchasing or store screen 138 is generated in the user interface 38, and likewise includes another listing 140 of descriptors 144 corresponding to the mood recharging characteristic values 86 of the respective word sequence sets 84. In the illustrated example, there is a word sequence set 84 for "Confidence" per the descriptor 144a, for "Happiness" per the descriptor 144b, and for "Energy" per the descriptor 144c. Those word sequence sets 84 already purchased and stored on the data processing apparatus are also included in the listing 140, distinguished by the begin button 83. Those not yet purchased are set apart with a price tag button 146 that shows the offer price, and the invocation of which is operative to begin the purchase process.

A more detailed description of a given word sequence set 84 may be presented in a word sequence set description screen 148 as shown in FIG. 12. Referring to the data structure diagram of FIG. 5, each word sequence set 84 is understood to include a descriptor 150 that provides an overview of the goals thereof. While the word sequence set 84 may be purchased directly from the listing 140 via the corresponding price tag button 146, purchasing from the word sequence set description screen 148 is also possible by selecting a purchase button 152. Subsequent standard interactivity common to in-application purchases conducted through the application distribution system 134 is contemplated, including various confirmation dialog boxes, and download progress meters.

The particulars shown herein are by way of example and for purposes of illustrative discussion of the embodiments of the present disclosure only and are presented in the cause of providing what is believed to be the most useful and readily understood description of the principles and conceptual aspects. In this regard, no attempt is made to show details of the present invention with more particularity than is necessary, the description taken with the drawings making apparent to those skilled in the art how the several forms of the present invention may be embodied in practice.

What is claimed is:

1. A method for shifting and recharging an emotional state of a user with word sequencing presented on a data processing apparatus with a display and an input, the method comprising the steps of:

receiving, from the user through the input of the data processing apparatus, a selection of a first word sequence set defined by a mood recharging characteristic value, the first word sequence set including a plurality of words each with at least one corresponding definition;

generating on the display with a first predefined typeface a first one of the plurality of words in the selected first word sequence set;

generating on the display with a second predefined typeface, while the first one of the plurality of words remains generated on the display, a first one of the at least one corresponding definition of the first one of the plurality of words in the selected first word sequence set for a time duration corresponding to a predefined cadence rate value; and

prompting the user with a question related to the mood recharging characteristic value and associated with the first word sequence set.

2. The method of claim 1, further comprising: receiving on the data processing apparatus through the input a user-supplied answer to the question.

3. The method of claim 1, wherein prior to prompting the user with the question, the method includes:

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generating on the display with the second predefined typeface, while the first one of the plurality of words remains generated on the display, a second one of the at least one corresponding definition of the first one of the plurality of words in the selected first word sequence set for the time duration.

4. The method of claim 1, wherein prior to prompting the user with the question, the method includes:

clearing the display of the first one of the plurality of words in the selected first word sequence set;

generating on the display with the first predefined typeface a second one of the plurality of words in the selected first word sequence set; and

generating on the display with the second predefined typeface, while the second one of the plurality of words remains generated on the display, a first one of the at least one corresponding definition of the second one of the plurality of words in the selected first word sequence set for the time duration.

5. The method of claim 4, wherein prior to prompting the user with the question, the method includes:

generating on the display with the second predefined typeface, while the second one of the plurality of words remains generated on the display, a second one of the at least one corresponding definition of the second one of the plurality of words in the selected first word sequence set for the time duration.

6. The method of claim 1, wherein the time duration is within a range of three to ten seconds.

7. The method of claim 1, further comprising:

receiving through the input a modification to the predetermined cadence rate value; and

updating the time duration according to the modification to the predetermined cadence rate value.

8. The method of claim 1, wherein the first predefined typeface has a first size and the second predefined typeface has a second size different from the first size.

9. The method of claim 1, wherein the first predefined typeface has a first visual style and the second predefined typeface has a second visual style different from the first visual style.

10. The method of claim 1, wherein the first one of the plurality of words in the selected first word sequence set is generated on the display of the data processing apparatus in response to a preset time notification.

11. The method of claim 1, wherein the first one of the plurality of words in the selected first word sequence set is generated on the display of the data processing apparatus in response to a geographic notification based upon a location value detected by the data processing apparatus being within a predefined distance of a trigger location.

12. The method of claim 1, wherein the first word sequence set is stored on the data processing apparatus.

13. The method of claim 12, further comprising:

querying a remote server for updates to the first word sequence set; and

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receiving the queried updates to the first word sequence set on the data processing apparatus.

14. The method of claim 13, wherein the updates include at least one update definition for a one of the words in the first word sequence set.

15. The method of claim 14, further comprising:

overwriting a selected one of the definitions of the one of the words in the first word sequence set stored on the data processing apparatus with the corresponding received update definition.

16. The method of claim 14, further comprising:

adding the received update definition to the one of the words in the first word sequence set stored on the data processing apparatus.

17. The method of claim 13, wherein the updates include a new word and at least one corresponding new definition therefor.

18. The method of claim 17, further comprising:

adding the received new word and the at least one new definition to the first word sequence set stored on the data processing apparatus.

19. The method of claim 1, further comprising:

transmitting to a remote server, a word sequence set purchase request including a payment authorization;

receiving a second word sequence set from the remote server; and

storing the second word sequence on the data processing apparatus.

20. The method of claim 1, wherein the data processing apparatus is a smart phone.

21. A non-transitory computer readable medium having computer-executable instructions for performing a method for shifting and recharging an emotional state of a user with word sequencing presented on a computer with a display and an input, the method comprising the steps of:

receiving, from the user through the input of the computer, a selection of a first word sequence set defined by a mood recharging characteristic value, the first word sequence set including a plurality of words each with at least one corresponding definition;

generating on the display with a first predefined typeface a first one of the plurality of words in the selected first word sequence set;

generating on the display with a second predefined typeface, while the first one of the plurality of words remains generated on the display, a first one of the at least one corresponding definition of the first one of the plurality of words in the selected first word sequence set for a time duration corresponding to a predefined cadence rate value;

prompting the user with a question related to the mood recharging characteristic value and associated with the first word sequence set; and

receiving on the data processing apparatus through the input a user-supplied answer to the question.

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